

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Krutchinsky, et al.

Examiner: Unassigned

Serial No.: Unassigned

Group Art Unit: Unassigned

Filed: Herewith

Docket: 1119-2 CON

Confirmation No.: Unassigned

Dated: September 8, 2003

For: METHOD OF TRANSMITTING
IONS FOR MASS SPECTROCOPY

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In order to fulfill the requirements of candor and good faith set forth in 37 C.F.R.

§ 1.56, Applicants submit herewith the following disclosure in accordance with the provisions of 37 C.F.R. § 1.97 and § 1.98.

I. UNITED STATES PATENTS

<u>PATENT NUMBER</u>	<u>ISSUE DATE</u>	<u>PATENTEE</u>
6,121,607	September 19, 2000	Whitehouse et al.
6,111,250	August 29, 2000	Thomson et al.
6,107,623	August 22, 2000	Bateman et al.
6,040,423	March 21, 2000	Frank et al.
6,020,586	February 1, 2000	Dresch et al.

Applicants: Krutchinsky, et al.
Serial No.: Unassigned
Filed: Herewith
Page 2 of 5

Docket No.: 1119-2 CON

5,869,829	February 9, 1999	Dresch
5,818,055	October 6, 1998	Franzen
5,965,884	June 1998	Laiko et al.
5,672,868	September 30, 1997	Mordehai et al.
6,075,244	January 23, 1997	Baba et al.
5,179,278	January 12, 1993	Douglas
4,935,624	June 19, 1990	Henion et al.
4,861,988	August 29, 1989	Henion et al.

II. FOREIGN PATENT DOCUMENTS

<u>PATENT OFFICE</u>	<u>DOCUMENT NUMBER</u>	<u>PUBLICATION DATE</u>
PCT	WO 99/38185	July 29, 1999

III. OTHER DOCUMENTS

1. **Author:** Krutchinsky et al.; **Title:** "Rapidly Switchable Matrix-Assisted Laser Desorption/Ionization and Electrospray Quadrupole-Time-Of-Flight Mass Spectrometry for Protein Identification"; *American Society for Mass Spectrometry*, Vol. 11, p. 493-504; **Date of Publication:** Unknown but copyrighted in 2000; **Place of Publication:** United States.

2. **Author:** Borman; **Title:** "Combinatorial Synthesis Hits The Spot", *Chemical and Engineering News*, Vol. 78, No. 27, p.25-27; **Date of Publication:** July 3, 2000; **Place of Publication:** United States.
3. **Author:** Cha et al.; **Title:** "An interface with a Linear Quadrupole Ion Guide for an Electrospray-Ion Trap Mass Spectrometer System"; *American Chemical Society*, Vol. 72, No. 22, pp. 5647-5654; **Date of Publication:** October 14, 2000; **Place of Publication:** Internet.
4. **Author:** Baykut et al.; **Title:** "Matrix-assisted laser desorption/ionization Fourier transform ion cyclotron resonance mass spectrometry with pulsed in-source collision gas and in-source ion accumulation"; *Rapid Communications in Mass Spectrometry*, Vol. 14, pp. 1238-1247; **Date of Publication:** Unknown but Copyrighted in 2000; **Place of Publication:** United States.
5. **Author:** Laiko et al.; **Title:** "Atmospheric Pressure MALDI/Ion Trap Mass Spectrometry" *Analytical Chemistry*, Vol. 72, No. 21, p. 5239-5243; **Date of Publication:** September 23, 2000; **Place of Publication:** Internet.
6. **Author:** Doroshenko et al.; **Title:** "Injection of Externally Generated Ions into an Increasing Trapping Field of a Quadrupole Ion Trap Mass Spectrometer" *Journal of Mass Spectrometry*, Vol. 31, pp. 602-615; **Date of Publication:** Unknown but Copyrighted in 1997; **Place of Publication:** United States.
7. **Author:** Jonscher et al.; **Title:** "Matrix-assisted Laser Desorption Ionization/Quadrupole Ion Trap Mass Spectrometry of Peptides" *Journal of Biological Chemistry*, Vol. 272, No. 3, pp. 1735-1741; **Date of Publication:** January 17, 1997; **Place of Publication:** United States.
8. **Author:** Qin et al.; **Title:** "Identification and Characterization of Posttranslational Modifications of Proteins by MALDI Ion Trap Mass Spectrometry"; *Anal. Chem.*, Vol. 69, No. 19, pp. 4002-4009, **Date of Publication:** October 1, 1997; **Place of Publication:** United States.
9. **Author:** Qin et al.; **Title:** "Matrix-Assisted Laser Desorption Ion Trap Mass Spectrometry: Efficient Trapping and Ejection of Ions" *Analytical Chemistry*, Vol. 68, No. 13, pp. 2102-2107; **Date of Publication:** July 1, 1996; **Place of Publication:** United States.

10. **Author:** Qin et al.; **Title:** "Matrix-Assisted Laser Desorption Ion Trap Mass Spectrometry: Efficient Isolation and Effective Fragmentation of Peptide Ions" *Analytical Chemistry*, Vol. 68, No. 13, pp. 2108-2112; **Date of Publication:** July 1, 1996; **Place of Publication:** United States.
11. **Author:** Jonscher et al.; **Title:** "The Whys and Wherefores of Quadrupole Ion Trap Mass Spectrometry"; **Date of Publication:** Unknown; **Place of Publication:** Internet.
12. **Author:** Qin et al.; **Title:** "A Practical Ion Trap Mass Spectrometer for the Analysis of Peptides by Matrix-Assisted Laser Desorption/Ionization" *Analytical Chemistry*, Vol. 68, No. 10, pp. 1784-1791; **Date of Publication:** May 15, 1996; **Place of Publication:** United States.
13. **Author:** Jonscher et al.; **Title:** "Mixture Analysis Using a Quadrupole Mass Filter/Quadrupole Ion Trap Mass Spectrometer" *Analytical Chemistry*, Vol. 68, No. 4, pp. 659-667; **Date of Publication:** February 15, 1996; **Place of Publication:** United States.
14. **Author:** Jonscher et al.; **Title:** "Matrix-assisted Laser Desorption of Peptides and Proteins on a Quadrupole Ion Trap Mass Spectrometer", *Rapid Communications in Mass Spectrometry*, Vol. 7, pp.20-26; **Date of Publication:** Unknown but copyrighted in 1993; **Place of Publication:** United States.
15. **Author:** Kofel et al.; **Title:** "A Novel Quadrupole, Quistor, Quadrupole Tandem Mass Spectrometer" *Organic Mass Spectrometry*, Vol. 26, pp. 463-467; **Date of Publication:** Unknown but Copyrighted in 1991; **Place of Publication:** United States.
16. Bio-CD Advertisement "BIO-CDTM: compact disc platform for DNA detection"; **Date of Publication:** Unknown; **Place of Publication:** Unknown.
17. **Title:** Burstein Laboratories, Inc. Advertisement; **Date of Publication:** Unknown; **Place of Publication:** Unknown.
18. **Author:** Loboda et al.; **Title:** "Novel LINAC II electrode Geometry to Create an Axial field in a Multipole Ion Guide"; **Date of Publication:** Unknown; **Place of Publication:** Unknown.

Applicants: Krutchinsky, et al.
Serial No.: Unassigned
Filed: Herewith
Page 5 of 5

Docket No.: 1119-2 CON

The references are also listed on Applicants' Substitute Form PTO-1449, which is attached to this Information Disclosure Statement for the convenience of the Examiner.

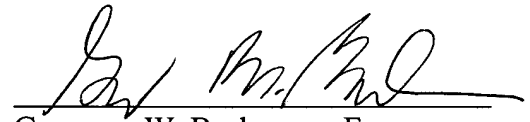
This patent application is a continuation of U.S. Serial No. 09/835,943 filed on April 15, 2001 which issued as U.S. Patent No. 6,617,577 on September 9, 2003.

Pursuant to 37 C.F.R. §1.98(d), the documents listed above are not being submitted.

These documents were either cited by the Examiner or submitted to the U.S. Patent Office during the prosecution of the aforementioned parent application.

If the Examiner has any questions or comments relating to the present application, he or she is respectfully invited to contact Applicants' attorney at the phone number set forth below.

Respectfully submitted,



Gregory W. Bachmann, Esq.
Registration No.: 41,593
Attorney for Applicants

HOFFMANN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791
(516) 822-3550
GWB/sbs

177229_1

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 2-32) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO. 1119-2 CON	SERIAL NO. Unassigned
	APPLICANT Krutchinsky, et al.	CONFIRMATION NO. Unassigned
	FILING DATE Herewith	GROUP Unassigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIAT E
	6,121,607	Sept. 19, 2000	Whitehouse et			
	6,111,250	August 29, 2000	Thomson et al.			
	6,107,623	August 22, 2000	Bateman et al.			
	6,040,423	March 21, 2000	Frank et al.			
	6,020,586	Feb. 1, 2000	Dresch et al.			
	5,869,829	Feb. 9, 1999	Dresch			
	5,818,055	Oct. 6, 1998	Franzen			
	5,965,884	June 1998	Laiko et al.			
	5,672,868	Sept. 30, 1997	Mordehai et al.			
	6,075,244	Jan. 23, 1997	Baba et al.			
	5,179,278	Jan. 12, 1993	Douglas			
	4,935,624	June 19, 1990	Henion et al.			
	4,861,988	August 29, 1989	Henion et al.			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
						YES	NO
	WO 99/38185	July 29, 1999	PCT				

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication with applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 2-32) PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 1119-2 CON	SERIAL NO. Unassigned
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Krutchinsky, et al.	CONFIRMATION NO. Unassigned
(Use several sheets if necessary)	FILING DATE Herewith	GROUP Unassigned

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		1. Author: Krutchinsky et al.; Title: "Rapidly Switchable Matrix-Assisted Laser Desorption/Ionization and Electrospray Quadrupole-Time-Of-Flight Mass Spectrometry for Protein Identification"; <i>American Society for Mass Spectrometry</i> , Vol. 11, p. 493-504; Date of Publication: Unknown but copyrighted in 2000; Place of Publication: United States.
		2. Author: Borman; Title: "Combinatorial Synthesis Hits The Spot", <i>Chemical and Engineering News</i> , Vol. 78, No. 27, p.25-27; Date of Publication: July 3, 2000; Place of Publication: United States
		3. Author: Cha et al.; Title: "An interface with a Linear Quadrupole Ion Guide for an Electrospray-Ion Trap Mass Spectrometer System"; <i>American Chemical Society</i> , Vol. 72, No. 22, pp. 5647-5654; Date of Publication: October 14, 2000; Place of Publication: Internet.
		4. Author: Baykut et al.; Title: "Matrix-assisted laser desorption/ionization Fourier transform ion cyclotron resonance mass spectrometry with pulsed in-source collision gas and in-source ion accumulation"; <i>Rapid Communications in Mass Spectrometry</i> , Vol. 14, pp. 1238-1247; Date of Publication: Unknown but Copyrighted in 2000; Place of Publication: United States.
		5. Author: Laiko et al.; Title: "Atmospheric Pressure MALDI/Ion Trap Mass Spectrometry" <i>Analytical Chemistry</i> , Vol. 72, No. 21, p. 5239-5243; Date of Publication: September 23, 2000; Place of Publication: Internet.
		6. Author: Doroshenko et al.; Title: "Injection of Externally Generated Ions into an Increasing Trapping Field of a Quadrupole Ion Trap Mass Spectrometer" <i>Journal of Mass Spectrometry</i> , Vol. 31, pp. 602-615; Date of Publication: Unknown but Copyrighted in 1997; Place of Publication: United States.
		7. Author: Jonscher et al.; Title: "Matrix-assisted Laser Desorption Ionization/Quadrupole Ion Trap Mass Spectrometry of Peptides" <i>Journal of Biological Chemistry</i> , Vol. 272, No. 3, pp. 1735-1741; Date of Publication: January 17, 1997; Place of Publication: United States.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication with applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 2-32) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO. 1119-2 CON	SERIAL NO. Unassigned
	APPLICANT Krutchinsky, et al.	CONFIRMATION NO. Unassigned
	FILING DATE Herewith	GROUP Unassigned

		8. Author: Qin et al.; Title: "Identification and Characterization of Posttranslational Modifications of Proteins by MALDI Ion Trap Mass Spectrometry"; <i>Anal. Chem.</i> , Vol. 69, No. 19, pp. 4002-4009, Date of Publication: October 1, 1997; Place of Publication: United States.
		9. Author: Qin et al.; Title: "Matrix-Assisted Laser Desorption Ion Trap Mass Spectrometry: Efficient Trapping and Ejection of Ions" <i>Analytical Chemistry</i> , Vol. 68, No. 13, pp. 2102-2107; Date of Publication: July 1, 1996; Place of Publication: United States.
		10. Author: Qin et al.; Title: "Matrix-Assisted Laser Desorption Ion Trap Mass Spectrometry: Efficient Isolation and Effective Fragmentation of Peptide Ions" <i>Analytical Chemistry</i> , Vol. 68, No. 13, pp. 2108-2112; Date of Publication: July 1, 1996; Place of Publication: United States.
		11. Author: Jonscher et al.; Title: "The Whys and Wherefores of Quadrupole Ion Trap Mass Spectrometry"; Date of Publication: Unknown; Place of Publication: Internet.
		12. Author: Qin et al.; Title: "A Practical Ion Trap Mass Spectrometer for the Analysis of Peptides by Matrix-Assisted Laser Desorption/Ionization" <i>Analytical Chemistry</i> , Vol. 68, No. 10, pp. 1784-1791; Date of Publication: May 15, 1996; Place of Publication: United States.
		13. Author: Jonscher et al.; Title: "Mixture Analysis Using a Quadrupole Mass Filter/Quadrupole Ion Trap Mass Spectrometer" <i>Analytical Chemistry</i> , Vol. 68, No. 4, pp. 659-667; Date of Publication: February 15, 1996; Place of Publication: United States.
		14. Author: Jonscher et al.; Title: "Matrix-assisted Laser Desorption of Peptides and Proteins on a Quadrupole Ion Trap Mass Spectrometer", <i>Rapid Communications in Mass Spectrometry</i> , Vol. 7, pp.20-26; Date of Publication: Unknown but copyrighted in 1993; Place of Publication: United States.
		15. Author: Kofel et al.; Title: "A Novel Quadrupole, Quistor, Quadrupole Tandem Mass Spectrometer" <i>Organic Mass Spectrometry</i> , Vol. 26, pp. 463-467; Date of Publication: Unknown but Copyrighted in 1991; Place of Publication: United States.
		16. Bio-CD Advertisement "BIO-CDTM: compact disc platform for DNA detection"; Date of Publication: Unknown; Place of Publication: Unknown.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication with applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 2-32) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO. 1119-2 CON	SERIAL NO. Unassigned
	APPLICANT Krutchinsky, et al.	CONFIRMATION NO. Unassigned
	FILING DATE Herewith	GROUP Unassigned

			17. Title: Burstein Laboratories, Inc. Advertisement; Date of Publication: Unknown; Place of Publication: Unknown.
			18. Author: Loboda et al.; Title: "Novel LINAC II electrode Geometry to Create an Axial field in a Multipole Ion Guide"; Date of Publication: Unknown; Place of Publication: Unknown.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication with applicant.